



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,631	07/02/2003	Charles C. Hart	A-2202-AL	3645

21378 7590 05/04/2006

APPLIED MEDICAL RESOURCES CORPORATION  
22872 Avenida Empresa  
Rancho Santa Margarita, CA 92688

EXAMINER
----------

YABUT, DIANE D

ART UNIT	PAPER NUMBER
----------	--------------

3734

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/612,631

Applicant(s)

HART ET AL.

Examiner

Diane Yabut

Art Unit

3734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 14-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/27/06.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. During a telephone conversation with Patrick Ikehara on Friday, April 21, 2006 a provisional election was made without traverse to prosecute the invention of Species 1 directed to Figures 2-17 and Claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-21 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 27 February 2006 is acknowledged. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Specification***

3. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informality: On page 8, line 19, it reads "there is a shown a perspective" and should be changed to --there is a perspective--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Toso et al.** (U.S. Patent No. **5,282,832**) in view of **Bonutti et al.** (U.S. Pub. No. **20050267534**).

Claims 1 and 2: Toso et al. discloses a suture clip with a first interlocking member **110** and a second interlocking member **120** which is operable of mating with the first interlocking member **110** (Figure 1 and col. 2, lines 53-56). The interlocking members **110** and **120** provide a first position for capturing the suture ends (col. 3, lines 44-45). A second position is also provided by the members for guiding and aligning the suture ends along a tortuous path within and between the interlocking members **110** and **120**, as well as a third position that allows for frictionally engaging the suture ends to provide secure entrapment of the suture (col. 3, lines 43-58). Toso et al. discloses the first interlocking member **110** having a "standing portion" consisting of **112** and **113** that engages with "mating window" **121** disposed in the second interlocking member **120**. Although Toso et al. discloses the limitations in one interlocking member, he does not disclose the limitations of at least one protrusion, at least one mating well, a standing

Art Unit: 3734

portion, and a mating window for each of the interlocking members. It would have been obvious to one of ordinary skill in the art to provide these limitations on each of the two interlocking members of the device of Toso et al. for secure engagement of the two connecting elements.

Also not claimed by Toso et al. is the protrusions being cylindrical and sized to match opposing mating holes. Bonutti et al. discloses a suture retainer with cylindrical protrusions **360**, **362**, **364**, and **366**, which are fixedly connected with rectangular end walls (Figure 20 and page 12, paragraph 157). Bonutti et al. teaches that the bends formed in the suture around the cylindrical protrusions are free of abrupt stress inducing discontinuities (page 12, paragraph 164). It would have been obvious to one of ordinary skill in the art at the time of invention to provide cylindrical protrusions, as taught by Bonutti et al., to the device of Toso et al., in order to form bends lacking stress inducing discontinuities. Although opposing mating holes are not located opposite the cylindrical protrusions in Bonutti et al., but rather fixed connections to opposite end walls, it would have been obvious to one of ordinary skill to provide an opposing mating hole to the protrusions since it was known in the art that protrusions of one member readily engage with holes or apertures of another member within two connecting members. It would have been obvious to one of ordinary skill in the art to provide protrusions, as taught by Bonutti et al. and corresponding mating holes for secure engagement of the two interlocking members.

Claim 3: Toso et al. discloses the standing portion consisting of **112** and **113**, which could also be considered as protrusion elements, that have barbs **115** and **116** to

Art Unit: 3734

engage with the mating window **121**, which could also be considered as a mating hole (Figure 2). The barbs **115** and **116** could be applied to the cylindrical protrusions of Bonutti et al.

Claims 4-5: Toso et al. discloses the mating window **121** sized and configured to receive the opposing standing portion consisting of **112** and **113**, as well as the suture ends **130** (Figure 1).

Claim 6: Toso et al. lacks the limitation of the assembly of the interlocking members being able to be advanced, retracted or adjusted along the length of the suture. Bonutti et al. discloses the suture retainer being able to move along sections of a suture (page 12, paragraph 161).

Claims 7-8: Toso et al. discloses the standing portion consisting of **112** and **113** with locking barbs **115** and **116** that are snap fit with the receiving portion of second interlocking member **120** (col. 3, lines 6-11).

Claim 9: Toso et al. discloses the suture clip being made out of plastics of the same genus as the suture, such as bioabsorbable polymeric material (col. 2, lines 57-62).

7. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Toso et al.** (U.S. Patent No. **5,282,832**) and **Bonutti et al.** (U.S. Pub. No. **20050267534**) as applied to Claim 1 above, and further in view of **Wenstrom, Jr. et al.** (U.S. Patent No. **6,045,573**).

Claims 10-13: Toso et al. and Bonutti et al. disclose the claimed device except for the interlocking members being formed of metal, including stainless steel, titanium, silver,

Art Unit: 3734

gold, and aluminum. Both references also disclose the claimed device except for the metal being malleable and the interlocking members being formed of plastic and metal. Wenstrom, Jr. et al. discloses a suture anchor, or a member having a suture mounted thereto, which can be made of materials such as stainless steel, titanium, gold, and equivalents thereof (such as silver and aluminum) that are non-absorbable materials. It would have been obvious to one of ordinary skill in the art at the time of invention to provide the metal material including stainless steel, titanium, silver, gold and aluminum, as taught by Wenstrom, Jr. et al., to the combined device of Toso et al., Bonutti et al., in order to provide a non-absorbable material for use with sutures. Furthermore, one skilled in the art would use well-known materials, such as any suitable metal or non-metal material (plastic), or combination thereof, to form the interlocking members in the combined device of Toso et al. and Bonutti et al. since they would yield well-known properties such as being bio-absorbable or malleable, which is helpful in accommodating movement and is bendable.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Wixey et al.** (U.S. Pub. No. **20050096699**) discloses a suture securing device with locking pieces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane Yabut whose telephone number is (571) 272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

Art Unit: 3734

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DY



**MICHAEL J. HAYES**  
**PRIMARY EXAMINER**